Appl. No. 10/731,604
Amdt. dated November 21, 2008
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PATENT

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1   1. (Currently amended): A method of searching unstructured data stored in a
2   database, the method comprising:
3   storing unstructured data in a column of a database table in character large object
4   (CLOB) format;
5   generating a first graphical user interface and displaying the first graphical user
6   interface on a display device, the first graphical user interface configured to enable users to
7   designate elements in the unstructured data as query elements;
8   receiving user input via the first graphical user interface identifying one or more
9   elements in the unstructured data stored in CLOB format as query elements;
10   generating a plurality of database tables representing an intermediate index
11   between each query element and at least one of the one or more elements identified as query
12   elements in the unstructured data stored in CLOB format;
13   generating one or more queries on the unstructured data stored in CLOB format
14   using the query elements;
15   translating a query element associated with a query on the unstructured data based
16   on the plurality of tables to a corresponding element in the unstructured data stored in CLOB
17   format; and
18   obtaining information from the unstructured data stored in CLOB format for the
19   corresponding element.

1   2. (Previously presented): The method of claim 1 wherein the one or more
2   queries specify at least one value and an operation that is to be performed on a user-identified
3   element in the unstructured data.

1   3. (Previously presented): The method of claim 2 wherein the one or more

2   queries further include a start date and an end date.

           4. (Canceled)

1   5. (Previously presented): The method of claim 1 wherein the unstructured data

2   comprises a well-formed XML document stored within a column of a database table.

1   6. (Previously presented): The method of claim 5 wherein XML fields of the

2   unstructured data are filled with transaction data intercepted from a database transaction prior to

3   committing the transaction based on a predefined mapping to multiple data sources.

1   7. (Previously presented): The method of claim 6 wherein the multiple data

2   sources comprise multiple tables of a database.

1   8. (Original): The method of claim 1 wherein the unstructured data is part of an

2   electronic record stored in a common repository of electronic records that provides an audit trail

3   that cannot be altered or disabled by users of the system.

1   9. (Currently amended): A method of searching XML data stored in a column of

2   a database table in character large object (CLOB) format, the method comprising:

3   storing the XML data in the column of the database table in CLOB format,

4   wherein the XML data comprises a first plurality of XML elements that conform to a first data

5   type definition (DTD) and a second plurality of XML elements that conform to a second DTD;

6   generating a first graphical user interface and displaying the first graphical user

7   interface on a display device, the first graphical user interface configured to enable users to

8   designate XML elements in the first and second plurality of XML elements in the unstructured

9   data as query elements

10   receiving user input via the first graphical user interface identifying one or more

11   XML elements in the first and second plurality of XML elements as query elements;

12   generating a plurality of database tables representing an intermediate index

13   between each query element and at least one of the one or more <u>XML</u> elements in the first and

14   second plurality of XML elements identified as query elements ~~in the unstructured data stored in~~

15   ~~CLOB format~~;

16   generating one or more queries on the unstructured data stored in CLOB format

17   using the query elements;

18   translating a query element associated with a query on the unstructured data based

19   on the plurality of tables to a corresponding <u>XML</u> element in the unstructured data stored in

20   CLOB format; and

21   obtaining information from the unstructured data stored in CLOB format for the

22   corresponding <u>XML</u> element.

1   10. (Currently amended): The method of claim 9 wherein the first and second

2   DTDs include first and second XML elements, respectively, that share a common name but

3   represent different types of data; and

4   wherein translating a query element associated with a query on the unstructured

5   data based on the plurality of tables to a corresponding <u>XML</u> element in the unstructured data

6   stored in CLOB format comprises translating a first query element that represents the first XML

7   element and not the second XML element and a second query element that represents the second

8   XML element and not the first XML element.

1   11. (Currently amended): A computer system for searching unstructured data

2   stored in a database, the computer system comprising:

3   a processor;

4   a database; and

5   a computer-readable memory coupled to the processor, the computer-readable

6   memory configured to store a computer program;

7   wherein the processor is operative with the computer program to:

8   ~~(i)~~   store unstructured data in a column of a database table in character

9   large object (CLOB) format;

10   generate a first graphical user interface and displaying the first

11   graphical user interface on a display device, the first graphical user interface configured

12   to enable users to designate elements in the unstructured data as query elements;

13   (ii)   receive user input via the first graphical user interface identifying

14   one or more elements in the unstructured data stored in CLOB format as query elements;

15   (iii)   generating a plurality of database tables representing an

16   intermediate index between each query element and at least one of the one or more

17   elements identified as query elements in the unstructured data stored in CLOB format;

18   (iv)   generating one or more queries on the unstructured data stored in

19   CLOB format using the query elements;

20   (v)   translating a query element associated with a query on the

21   unstructured data based on the plurality of tables to a corresponding element in the

22   unstructured data stored in CLOB format; and

23   (vi)   obtaining information from the unstructured data stored in CLOB

24   format for the corresponding element.

1   12. (Previously presented): The computer system of claim 11 wherein the one or

2   more queries specify at least one value and an operation that is to be performed on a user-

3   identified element in the unstructured data.

          13. (Canceled)

1   14. (Previously presented): The computer system of claim 11 wherein the

2   unstructured data comprises well-formed XML documents stored within a column of a table

3   stored in the database.

1   15. (Original): The computer system of claim 14 wherein fields of the

2   unstructured data are filled with transaction data from a database transaction based on a

3   predefined mapping to multiple data sources.

1   16. (Currently amended): A computer-readable storage medium storing a

2   computer program operative with a processor of a computer system for searching unstructured

3   data stored in a database, the computer program comprising:

4   code for storing unstructured data in a column of a database table in character

5   large object (CLOB) format;

6   <u>code for generating a first graphical user interface and displaying the first</u>

7   <u>graphical user interface on a display device, the first graphical user interface configured to</u>

8   <u>enable users to designate elements in the unstructured data as query elements</u>

9   code for receiving user input <u>via the first graphical user interface</u> identifying one

10   or more elements in the unstructured data stored in CLOB format as query elements;

11   code for generating a plurality of database tables representing an intermediate

12   index between each query element and at least one of the one or more elements identified as

13   query elements in the unstructured data stored in CLOB format;

14   code for generating one or more queries on the unstructured data stored in CLOB

15   format using the query elements;

16   code for translating a query element associated with a query on the unstructured

17   data based on the plurality of tables to a corresponding element in the unstructured data stored in

18   CLOB format; and

19   code for obtaining information from the unstructured data stored in CLOB format

20   for the corresponding element.

1   17. (Previously presented): The computer program of claim 16 wherein the one

2   or more queries specify at least one value and an operation that is to be performed on a user-

3   identified element in the unstructured data.

          18. (Canceled)

1   19. (Original): The computer program of claim 16 wherein the unstructured data

2   comprises well-formed XML documents stored within a column of a table stored in the database.

1   20. (Original): The computer program of claim 16 wherein fields of the

2   unstructured data are filled with transaction data from a database transaction based on a

3   predefined mapping to multiple data sources.